

## Recovery Plan Action Status

**Plan Name:** Recovery Plan for *Hackelia venusta* (Showy Stickseed)

**Plan Status:** Final

**Plan Date:** 12-Dec-07

**Lead Agency:** USFWS

**Lead Office:** Washington Fish And Wildlife Office

(360)  
753-9440 )

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Showy stickseed ( <i>Hackelia venusta</i> )	2	1.1.1	Develop and implement USFS management plan	Not Started			Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Cost assumes some level of habitat management; \$1,000 per year after 2012.
Showy stickseed ( <i>Hackelia venusta</i> )	1	1.1.2	Revise WDOT management plan	Not Started			Washington Department of Transportation	Management: Planning	Labor type not yet selected	
Showy stickseed ( <i>Hackelia venusta</i> )	2	1.2	Develop and implement a trend monitoring plan	Not Started			Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Cost assumes \$1,000 per 3-year interval after 2012.
Showy stickseed ( <i>Hackelia venusta</i> )	3	1.2.1	Clarify taxonomic distinction between <i>H. venusta</i> and similar higher elevation <i>H. taylori</i>	Partially Complete	FY 2009	FY 2013	Universities	Research: Genetics	Contract, Graduate Student, Species Expert	FY2010 - FWS funded highly specific genetics investigation with WWU grad student .Draft report completed 08/2011- results inconclusive. Investigator selecting a different focal area in DNA will try again under another funding source.
Showy stickseed ( <i>Hackelia venusta</i> )	1	1.3	Conduct annual weed inventory and control	Ongoing Current	FY 2008		U.S. Forest Service	Management: Predator and Competitor Control	Internal Field Assistance, Volunteer	Cost reflects less control required over time. Through 2027 at \$1,000/year. Successful hand control of toadflax and knapweed implanted annually since 2001. A substantial reduction in weeds has been noted over time.

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Showy stickseed (Hackelia venusta)	3	1.4	Monitor and manage for presence of borage biocontrol agent	Not Started			Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Work type not yet selected	Labor type not yet selected	Note: Action duration is intermittent. Three inspections during life of the plan, with actions prioritized should the agent be identified near the population.
Showy stickseed (Hackelia venusta)	2	1.5.1	Pursue highest level of protection agreeable to landowners for private portion	Not Started			U.S. Fish and Wildlife Service, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	No estimate is available for land purchase or cost of conservation easement.
Showy stickseed (Hackelia venusta)	1	1.6.1	Maintain entry log	Not Started			U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Minimal associated costs.
Showy stickseed (Hackelia venusta)	1	1.6.2	Finalize seed collection guidelines	Not Started			Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Work type not yet selected	Labor type not yet selected	
Showy stickseed (Hackelia venusta)	3	1.6.3	Develop USFS guidelines for sharing information with the public and press	Not Started			U.S. Forest Service	Work type not yet selected	Labor type not yet selected	
Showy stickseed (Hackelia venusta)	2	1.6.4	Develop WDOT policy on minimizing effects of highway pullouts	Not Started			Washington Department of Transportation	Work type not yet selected	Labor type not yet selected	
Showy stickseed (Hackelia venusta)	2	1.7.1	Characterize and write up habitat requirements for H. venusta	Ongoing Current	FY 2010	FY 2014	Washington Department of Natural Resources, Universities	Research, Research: Habitat Requirements	Contract	FY 2010 - WDNR, under Sec. collected and analysed soil samples to determine unique qualities of soils at the site. FY2011 - Funded habitat characterization work with UW's Center for Urban Hort. - begins spring 2012.
Showy stickseed (Hackelia venusta)	1	1.7.1.1	Analyze existing habitat data collected by USFS	Ongoing Current	FY 2010		Washington Department of Natural Resources	Management: Population Monitoring, Research: Other Information	Contract	FY 2010 - WDNR collected and began entering USFS data in their "BIOTICS" database - Aalysis will follow.

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Showy stickseed (Hackelia venusta)	1	1.7.2	Identify breeding system and pollinators	Partially Complete	FY 2006		Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Research: Predation, Research: Propagation, Research: Reintroduction	Contract, Graduate Student, Internal Technical Assistance, Species Expert, Volunteer	Completed Master's thesis has started to address this action. Subject needs further research.
Showy stickseed (Hackelia venusta)	2	1.7.3	Conduct research into soils, geology, and mass wasting potential	Ongoing Current	FY 2012	FY 2014	Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Work type not yet selected	Labor type not yet selected	Funded soils structure/habitat characterization work with UW's Center for Urban Hort. - begins spring 2012.
Showy stickseed (Hackelia venusta)	2	2.1	Conduct field investigations for reintroduction sites and new populations	Ongoing Current	FY 2008	FY 2014	Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Management: Reintroduction, Research: Habitat Requirements, Research: Reintroduction	Graduate Student, Internal Field Assistance, Species Expert, Volunteer	Decrease in cost reflects reduced effort over time, ending in year 2012. Funded habitat characterization work and reintroduction site selection with UW's Center for Urban Hort. - begins spring 2012.
Showy stickseed (Hackelia venusta)	3	2.2	Create spatial database for inventory efforts, including negative searches	Not Started			Washington Department of Natural Resources, U.S. Forest Service	Work type not yet selected	Labor type not yet selected	Cost assumes reduced survey data collection over time.
Showy stickseed (Hackelia venusta)	3	3.1	Develop a plan for reintroduction of H. venusta into areas not occupied currently; explore augmenting the existing population	Ongoing Current	FY 2011	FY 2014	Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Work type not yet selected	Labor type not yet selected	Reintroduction of H. venusta will occur only after intensive surveys have been unable to locate additional populations. 2011 - Funded habitat characterization work informing a plan for reintroduction with UW's Center for Urban Hort. - begins spring 2012.
Showy stickseed (Hackelia venusta)	1	3.2	Determine how to most quickly establish viable populations	Not Started			Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Work type not yet selected	Labor type not yet selected	Initial figure represents start-up costs. Less short-term, more ongoing projects over time. Through 2011.

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Showy stickseed (Hackelia venusta)	3	3.3	Implement reintroduction plan. May include augmentation of existing population	Ongoing Current	FY 2012	FY 2014	Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Work type not yet selected	Labor type not yet selected	Note: Action duration is intermittent. Implement as determined by research (Action 3.2) as necessary. Reintroductions will require monitoring. 2011 - Funded soils/habitat characterization, reintroduction planning, culminating with a pilot reintroduction study by UW's Center for Urban Hort. - begins spring 2012.
Showy stickseed (Hackelia venusta)	1	4	Collect seed representing genetic diversity within the species and store in approved facility	Ongoing Current	FY 2008		Washington Department of Natural Resources, Berry Botanic Garden, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Other, Research: Propagation	Labor type not yet selected	Note: Action duration is intermittent. Cost assumes seed collection occurs only in highly productive years. Figure estimated at \$2,000 per 3-year interval, through 2027. Four seed collections undertaken since RP published. 2011 - seeds collected from 5 plants 07/15/2011 for Miller Seed Bank.
Showy stickseed (Hackelia venusta)	2	5	Establish a technical working group to review status, assess effectiveness of management plans	Ongoing Current	FY 2008		Washington Department of Natural Resources, U.S. Fish and Wildlife Service, U.S. Forest Service, Universities	Management: General	Internal Administrative, Internal Technical Assistance, Species Expert, Volunteer	This has become an action to be carried out by current recovery group. Action duration is intermittent. Continues through 2027.